Title (en)

Sensor system for the ultrasonic investigation of the position and/or contour of an object.

Title (de)

Sensorsystem zur Untersuchung der Lage und/oder der Kontur eines Objekts mittels Ultraschall.

Title (fr)

Système de capteurs pour la détermination de la position et/ou du profil d'un objet par ultra-sons.

Publication

EP 0179327 A1 19860430 (DE)

Application

EP 85112548 A 19851003

Priority

DE 3438038 A 19841017

Abstract (en)

1. Sensor system for the examination of the condition and/or the contour of an object by means of ultrasound, - the object (OB) to be examined being arranged in the transmission path between ultrasound emitter (UG) and receiver (UE), and - with an evaluation unit (AE) for analyzing the influences on the sound parameters, caused by the object (OB), characterized in that, - the object (OB) rests upon an object carrier (OT), on the sides of which, facing each other, the ultrasound emitter (UG) and receiver (UE) are attached, the transmission path of the sound running through the object carrier (OT) parallel to the bearing surface of the object (OB) on the object carrier (OT), in that - the object carrier (OT) has tongue-like parts (f1 ... f6; f1' ... f6') which can carry out natural mechanical oscillations in the frequency range of the ultrasound emitter and which are arranged on the surface of the object carrier (OT) in such a way that when the object to be examined or parts thereof are rested upon them, the natural mechanical oscillations are impeded, and in that - the received frequencies, influenced in their intensity by the object, are analyzed with the evaluation unit (AE).

Abstract (de)

Die Erfindung bezieht sich auf ein Sensorsystem zur taktilen Erkennung eines Objekts (OB), bei dem das Objekt (OB) ein Ultraschallfeld beeinflußt. Um eine Aussage über die Lage und/oder die Kontur des Objekts (OB) zu erhalten, weist ein Objektträger (OT) zungenartige Gebilde (f1 ... f6; f1' ... f6') auf, die, angeregt vom Ultraschallfeld. mechanische Schwingungen ausführen. Bei Anliegen des Objekts (OB) am Objektträger (OT) verändert sich das Schwingungsverhalten der zungenartigen Gebilde (f1 ... f6; f1'... f6'), so daß anhand von Frequenz- und/oder Amplitudenänderung das Objekt (OB) analysiert werden kann. Die Erfindung ist vor allem bei Handhabungs- oder Fertigungsautomaten anwendbar.

IPC 1-7

G01B 17/00

IPC 8 full level

G01B 17/00 (2006.01)

CPC (source: EP)

G01B 17/00 (2013.01)

Citation (search report)

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